ABSTRACT

In accordance with the invention, there are provided methods, capsules, and
delivery systems useful in preparing biological containment systems with properties
(e.g., mechanical strength, capsule permeability and porosity, desired controlled
release rates of the biologic or components secreted by the biologic, and
immunoreactivity) that can be varied to adapt to a broader range of physiological
conditions than known biological containment systems. There are also provided
methods of making capsules containing cell aggregates therein, as well as the capsules
formed thereby, which are useful as a quantitatively plentiful and low cost alternative
to usage of freshly harvested cell aggregates (e.g., islets from pancreas), since the
latter are usually available only in limited numbers.